

IOWA ACUTE DISEASE MONTHLY UPDATE

CENTER FOR ACUTE DISEASE EPIDEMIOLOGY

April, 2018



Iowa Department of public Health

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INTRODUCTION

The Center for Acute Disease Epidemiology (CADE) uses the most recent Council of State and Territorial Epidemiologists (CSTE) / Centers for Disease Control and Prevention (CDC) case definitions found on the [National Notifiable Disease Surveillance System \(NNDSS\)](#) page. These definitions are used to classify the case as confirmed, probable, suspect, not a case, or awaiting more information. **Only confirmed and probable cases meeting the CSTE/CDC case definitions are included in official case counts.**

CADE began using the suspect case definition as a final classification on Jan 1, 2017. Suspect cases are not included in the official case count but only meant to better estimate burden of disease. Any counts in this report from dates prior to Jan 1, 2017 do not include suspect cases.

Disease case counts were compiled from the Iowa Disease Surveillance System (IDSS). Data are provisional and subject to monthly reporting variation.

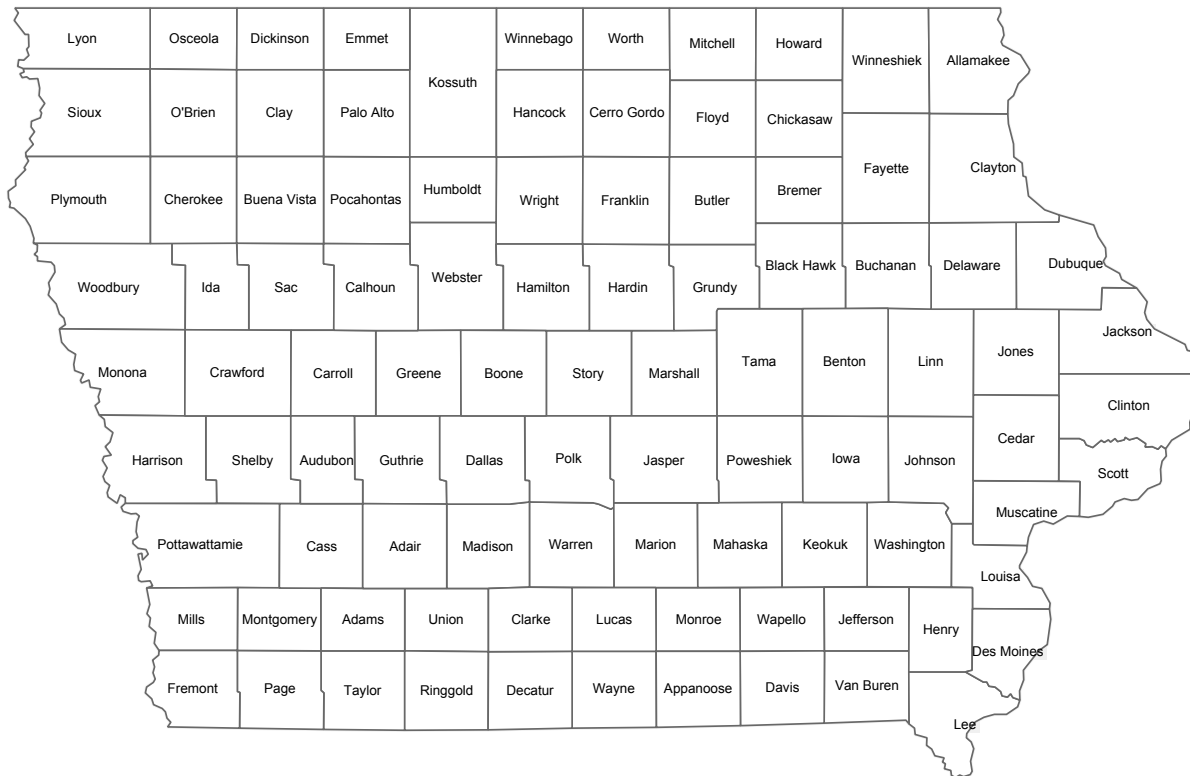
Hospitalization data is collected from the IDSS database. In some instances, cases may have been hospitalized for reasons other than the disease indicated.

Forecasting was done using Tableau forecast models.

Rates were calculated using the April 1, 2010 estimated census population for the State of Iowa.

Iowa County Boundaries and Population

2010 Census Data



April 1, 2010 population estimates

Adair	7,682	Floyd	16,303	Monona	9,243
Adams	4,029	Franklin	10,680	Monroe	7,970
Allamakee	14,330	Fremont	7,441	Montgomery	10,740
Appanoose	12,887	Greene	9,336	Muscatine	42,745
Audubon	6,119	Grundy	12,453	O'Brien	14,398
Benton	26,076	Guthrie	10,954	Osceola	6,462
Black Hawk	131,090	Hamilton	15,673	Page	15,932
Boone	26,306	Hancock	11,341	Palo Alto	9,421
Bremer	24,276	Hardin	17,534	Plymouth	24,986
Buchanan	20,958	Harrison	14,928	Pocahontas	7,310
Buena Vista	20,260	Henry	20,145	Polk	430,640
Butler	14,867	Howard	9,566	Pottawattamie	93,158
Calhoun	9,670	Humboldt	9,814	Poweshiek	18,914
Carroll	20,816	Ida	7,089	Ringgold	5,131
Cass	13,956	Iowa	16,355	Sac	10,350
Cedar	18,499	Jackson	19,848	Scott	165,224
Cerro Gordo	44,151	Jasper	36,842	Shelby	12,167
Cherokee	12,072	Jefferson	16,843	Sioux	33,704
Chickasaw	12,439	Johnson	130,882	Story	89,542
Clarke	9,286	Jones	20,638	Tama	17,767
Clay	16,667	Keokuk	10,511	Taylor	6,317
Clayton	18,129	Kossuth	15,543	Union	12,534
Clinton	49,116	Lee	35,862	Van Buren	7,570
Crawford	17,096	Linn	211,226	Wapello	35,625
Dallas	66,135	Louisa	11,387	Warren	46,225
Davis	8,753	Lucas	8,898	Washington	21,704
Decatur	8,457	Lyon	11,581	Wayne	6,403
Delaware	17,764	Madison	15,679	Webster	38,013
Des Moines	40,325	Mahaska	22,381	Winnebago	10,866
Dickinson	16,667	Marion	33,309	Winnesiek	21,056
Dubuque	93,653	Marshall	40,648	Woodbury	102,172
Emmet	10,302	Mills	15,059	Worth	7,598
Fayette	20,880	Mitchell	10,772	Wright	13,229

Case Counts for March 2018

Confirmed, Probable, and Suspect Cases

Note: Only counties with cases in February are displayed in the table.

	Anaplasmosis/ Ehrlichiosis	Campylobacteriosis	CRE	Cryptosporidiosis	E. coli (STEC)	Giardiasis	Hansen	Hepatitis A	Hepatitis B (acute and chronic)	Legionellosis	Listeria	Lyme	Meningococcal invasive disease	Mumps	Pertussis	Salmonellosis	Shigellosis	Grand Total
Adams		1																1
Allamakee						1												1
Appanoose					1													1
Benton					1											1		2
Black Hawk		1			1											1		3
Boone																1		1
Buena Vista		1																1
Calhoun		2														1		3
Cass				3														3
Cedar		1																1
Cerro Gordo		5																5
Cherokee	1																	1
Clarke		3																3
Clay																1		1
Clayton									1									1
Clinton									1						1			2
Crawford		1		3					2									6
Dallas												1				3	1	5
Delaware				2														2
Dickinson				1														1
Dubuque		6					1					2				2		11
Fayette															1	1		2
Franklin		1														1		2
Greene		1																1
Guthrie		2		1														3
Harrison		1																1
Howard																1		1
Humboldt		1																1
Jackson				1		1												2
Jasper		3														1		4
Johnson		2			4	1			2		1	1				1		12
Jones		4														1		5
Kossuth		1														1		2
Lee																2		2
Linn		6		3		1			1		1				2	8	1	23
Lucas		1																1
Mahaska					2											1		3
Marion						1							1					2
Mills		1				1												2
Mitchell					1													1
Monroe				1	1													2
Muscatine		3								1						1		5
O'Brien		1																1
Osceola		1																1
Page																1		1
Palo Alto		1																1
Plymouth		1		1														2
Polk		22		6	4	3		1	1					2	1	12	3	55
Pottawattamie		1																1
Ringgold		1																1
Sac		2		3		1												6
Scott		4															1	5
Shelby																1		1
Sioux		4		2														6
Story		5										1				1		7
Union				1														1
Wapello		1		2												2		5
Warren		1														1		2
Washington						1										1		2
Webster				1	1											2		4
Woodbury		1	1	6					1							2		11
Grand Total	1	94	1	37	16	11	1	1	9	1	2	5	1	2	5	52	6	245

Confirmed, Probable, and Suspect Cases

	Anaplasmosis/ Ehrlichiosis	Campylobacteriosis	CRE	Cryptosporidiosis	E. coli (STEC)	Giardiasis	Hepatitis A	Legionellosis	Listeria	Lyme	Malaria	Mumps	Pertussis	Rocky Mountain spotted fever	Salmonellosis	Shigellosis	Grand Total
Adams		1															1
Allamakee		1		1		1				1					5		9
Appanoose				1	1										1		3
Audubon						1									1		2
Benton		2			1	1							1		9		14
Black Hawk		3			2							3	1		8	2	19
Boone		2			2										5		9
Bremer															3		3
Buchanan		2										1			1		4
Buena Vista		4				1									3	1	9
Butler															4		4
Calhoun		3													1		4
Carroll															2		2
Cass				3										1			4
Cedar		1													2		3
Cerro Gordo		6	1												11		18
Cherokee	1	1		1											1		4
Chickasaw															1		1
Clarke		4			1												5
Clay															2		2
Clayton		2		2	2										2		8
Clinton								1				1	1		6		9
Crawford		1		3			1										5
Dallas		5		3	2	2				1		1			10	3	27
Delaware		2		2											5		9
Des Moines		3		3	1										5		12
Dickinson		1		1											1		3
Dubuque		8		2	1	3		1		5		1	2		11		34
Emmet															2		2
Fayette													1		1		2
Floyd															1		1
Franklin		2													3		5
Greene		3													4		7
Grundy															1		1
Guthrie		3		1											1	1	6
Hamilton		1											1		1		3
Hancock						1											1
Hardin		1													1		2
Harrison		1															1
Henry				1											2		3
Howard		2													3		5
Humboldt		4			1												5
Ida															1		1
Iowa				2	1										1		4
Jackson		1		1		2						2			5		11
Jasper		4				1									8		13
Jefferson		2									1		3		1		7
Johnson		4		2	7	4			1	1		1			12		32
Jones		6		2		1									5		14

YTD Case Counts

(Counties K-W)

Confirmed, Probable, and Suspect Cases

	Anaplasmosis/ Ehrlichiosis	Campylobacteriosis	CRE	Cryptosporidiosis	E. coli (STEC)	Giardiasis	Hansen	Hepatitis A	Hepatitis B (acute and chronic)	Legionellosis	Listeria	Lyme	Malaria	Meningococcal invasive disease	Mumps	Pertussis	Q Fever (acute and chronic)	Rocky Mountain spotted fever	Rubella	Salmonellosis	Shigellosis	Total
Adams		1																				1
Fayette																1				1		2
Harrison		1																				1
Kossuth		1																		3		4
Lee										1										4		5
Linn		15		3	2	1			3	1	1				1	3		1		58	1	90
Louisa																	1			1		2
Lucas		2																		2		4
Lyon		3		1																2		6
Madison				1																8		9
Mahaska		2			2															5		9
Marion		4				1								1						2		8
Marshall		1		1		1						1								6		10
Mills		2				1																3
Mitchell				4	2															1		7
Monroe				1	1	1																3
Montgomery		1																		4		5
Muscatine		5								2					1					5		13
O'Brien		1																		2		3
Osceola		2																				2
Page																				1		1
Palo Alto		1									1											2
Plymouth		1		4																6		11
Pocahontas		2																		1		3
Polk		82		12	15	9		1	8			2	2		3	2				63	6	205
Pottawattamie		2				1			1											6		10
Poweshiek																1				2		3
Ringgold		1																				1
Sac		6		3		1		1												1		12
Scott		7		1	5			1				2				5				12	9	42
Shelby		2		1																5		8
Sioux		5		4		1														13		23
Story		6		1		2			1			1			1					11		23
Tama																				4		4
Taylor																				1		1
Union				1																7		8
Van Buren		1				1																2
Wapello		1		3					2											5		11
Warren		3		1	1					1						1				7		14
Washington		1				1										4				5		11
Webster		2		1	1				1			1								13		19
Winneshiek									2													2
Woodbury		3	1	12					3				1							12		32
Wright		4																		1		5
Grand Total	1	255	2	86	51	39	1	4	34	7	3	15	4	1	16	26	1	2	1	432	23	1004

Case Counts for April 1, 2017 - March 31, 2018

(Counties A-E)

Confirmed, Probable, and Suspect Cases

	Anaplasmosis/Ehrlichiosis	Babesiosis	Campylobacteriosis	Chikungunya	CRE	Cryptosporidiosis	Cyclosporiasis	Dengue	E. coli (STEC)	Giardiasis	Haemophilus influenzae type b	Hansen	Hemolytic uremic syndrome	Hepatitis A	Hepatitis B (acute and chronic)	Legionellosis	Listeria	Lyme	Meningococcal invasive disease	Mumps	Pertussis	Q Fever (acute and chronic)	Rocky Mountain spotted fever	Salmonellosis	Shigellosis	Tularemia	West Nile virus	Grand Total
Adair			2			1															2			3				8
Adams			1			1			1																			3
Allamakee	5		11			10			2	3								4						13			1	49
Appanoose			7			5			2						1						5		1	4				25
Audubon			3			2			2	1														3				11
Benton	1		18			9			7	1					1	1		9		6	1			14	1			69
Black Hawk			8	1		3			4	7					9	3		8	1	9	15			32	3			103
Boone			13		1	2	1		6	1	1		1					2			1			15				44
Bremer			2						1						2			1		1	1			5				13
Buchanan			10		2	3			3	5	1									2				12				38
Buena Vista			24			7			1	1			1		4			1						4	8		1	52
Butler			1			1				1						2						1		5				11
Calhoun			15				1		4														1	6	1			28
Carroll			9			3			5												2			11				30
Cass			2			3			3	1					2						2		1	4				18
Cedar			6			7			3						1			3						8	1			29
Cerro Gordo	1		20		5	4			4	1					3		1	2			1			13				55
Cherokee	1		2			2			4								1	1						10				21
Chickasaw		1	4		1	1			1							1		1						4				14
Clarke			13			2			3	1												1		4	1			25
Clay			4		1	3			2						1									3				14
Clayton	1		11		3	17	1		4				1		2			17		1		1		5				64
Clinton			19		1	3			3						5	2				2	1			18				54
Crawford			11			5			4	1				1	3					1				1	1			28
Dallas	1		29		4	26		1	11	7					4			4		1	7		2	31	7			135
Davis			1			1								1							1							4
Decatur			1			2			1																1	1		6
Delaware			16			9			4	2								3		1	1			12				48
Des Moines	1		12			8			9					2				1						13	2			48
Dickinson			8			7			1						1			1				1		3				22
Dubuque	2		42		7	25	1		23	13		1			2	3		39		2	3	1	1	31	1			197
Emmet			1		1	2			1	1						1		1					1	2				11

Case Counts for April 1, 2017 - March 31, 2018

(Counties F-L)

Confirmed, Probable, and Suspect Cases

	Anaplasmosis/Ehrlichiosis	Campylobacteriosis	CRE	Cryptosporidiosis	Cyclosporiasis	E. coli (STEC)	Giardiasis	Hemolytic uremic syndrome	Hepatitis B (acute and chronic)	Lacrosse	Legionellosis	Listeria	Lyme	Malaria	Mumps	Pertussis	Q Fever (acute and chronic)	Rocky Mountain spotted fever	Salmonellosis	Shigellosis	Tetanus	West Nile virus	Grand Total
Fayette		2		1		2	3		3				3			1			6				21
Floyd		13					1		1				2						5				22
Franklin		4	1			2	1								1				4	2			15
Fremont		2																1		1			4
Greene		12		2		5	2	1											6				28
Grundy													2		1				6				9
Guthrie		11	1	2		5	1		1						1	2			5	1			30
Hamilton		4		3		3	1								1	1	1		4	1			19
Hancock		4	2	5		1	1												4				17
Hardin	1	14				2	1						1						4				23
Harrison	1	4				4	1							1	2			1	1				15
Henry		4		1		1	1										1		7				15
Howard		7		3					1				1						4		1		17
Humboldt		8		1		1	1												2				13
Ida		1		1															1			1	4
Iowa	1	7		4		4	1										1		2				20
Jackson		12	1	3		6	5						6		2	3			9				47
Jasper		22	2	4		5	3		1				2	1				1	17				58
Jefferson	1	6		3	1		3		2				1	2		3			2				24
Johnson	1	41	2	13	4	27	16		16		2	1	40	3	7	26			39	2			240
Jones		19	4	7		7	4		1				3						7				52
Keokuk		6	1	5		1							1			1		1	4				20
Kossuth		5	2	1		4	2		1										5				20
Lee	1	4	16	4		2	2				1								7	3			40
Linn	1	66	7	35	1	21	24		22		1	1	32	1	9	12		1	106	4		1	345
Louisa		3				1			1								1		2				8
Lucas	1	12		3		6	1			1							1		2				27
Lyon		9		6		8	1	1											11			2	38

Case Counts for April 1, 2017 - March 31, 2018

Counties (M-W)

Confirmed, Probable, and Suspect Cases

	Anaplasmosis/Ehrlichiosis		Babesiosis	Campylobacteriosis	Chikungunya	CRE	Cryptosporidiosis	Cyclosporiasis	Dengue	E. coli (STEC)	Giardiasis	Haemophilus influenzae type b	Hemolytic uremic syndrome	Hepatitis A	Hepatitis B (acute and chronic)	Hepatitis D	Hepatitis E	Lacrosse	Legionellosis	Listeria	Lyme	Malaria	Meningococcal invasive disease	Mumps	Pertussis	Q Fever (acute and chronic)	Rocky Mountain spotted fever	Salmonellosis	Shigellosis	Tetanus	Tularemia	West Nile virus	Grand Total
Madison				12			8			6	2																	9			1		38
Mahaska				13			2	2		4	2																	12					35
Marion				10			7			2	1				1						1		1		2			6					31
Marshall	1			9	2	2	3			3	3				5	1				1	1	3			1			13					48
Mills				5			5			3	1									1								3	2				20
Mitchell				14	2	13				13	2																	3					47
Monona				1							1																	3					5
Monroe				3			5			4	1														2			2					17
Montgomery				4	1										1													4					10
Muscatine				19	3	2	1	1	13	1				1	2		1		3		3				1	1		12	24				88
O'Brien				10	2	1				2	2																	7					24
Osceola				5			1																					1				1	8
Page				6			1			2	1																	6					16
Palo Alto				10						1					1						1							1					14
Plymouth				8	2	13				5	4				1										1			7					41
Pocahontas				9			2			7			1															5					24
Polk				219	8	62	6	1	66	49				3	79	3			3		21	9		7	31	1	3	143	29		1	1	745
Pottawattamie	1			19			4	1	1	4	7				6				2		3					5		1	23	5		1	83
Poweshiek				5			1			2															1	1	1	5				1	17
Ringgold				3			3			1											1												8
Sac				17			8			4	4			1												1		5					40
Scott	1			39	5	9	1			18	13	1		2	13				4		15	1	1		47			34	59				263
Shelby				8			7			4			1													1		13					34
Sioux				27			37	2		5	8				1						1					1		31	2				115
Story	3	2		33		2	14	2		5	13				8				1		5	2		14				24	3			1	132
Tama				3			2			2											1			1				12	3				24
Taylor							1			1			1															1					4
Union				9			6			6	1				1				1									9					33
Van Buren				8			3			1	1															1		1					15
Wapello				19			6			4					9	1					1	1			5			8					54
Warren		1		20		2	9			6	8				2				1					2	3		1	21	1		1		78
Washington				10			2			2	2														7			9					32
Wayne																												2					2
Webster				9			4		1	6	3				1						3			1		1		20					49
Winnebago	2			2			3														1							1					9
Winneshiek	1			13	1	15	1			2					2		1				8			6				6					56
Woodbury	1			17		7	29		1	5	7				15						1	1			4		1	27	1			1	118
Worth				3	1	5				3																							12
Wright				12	1	1				1																		4	4				23
Grand Total	31	4	1261	1	104	574	29	6	450	260	3	8	11	239	5	2	1	34	6	260	22	3	84	201	16	19	1054	174	1	4	12		4879

Campylobacter

94

Cases in March

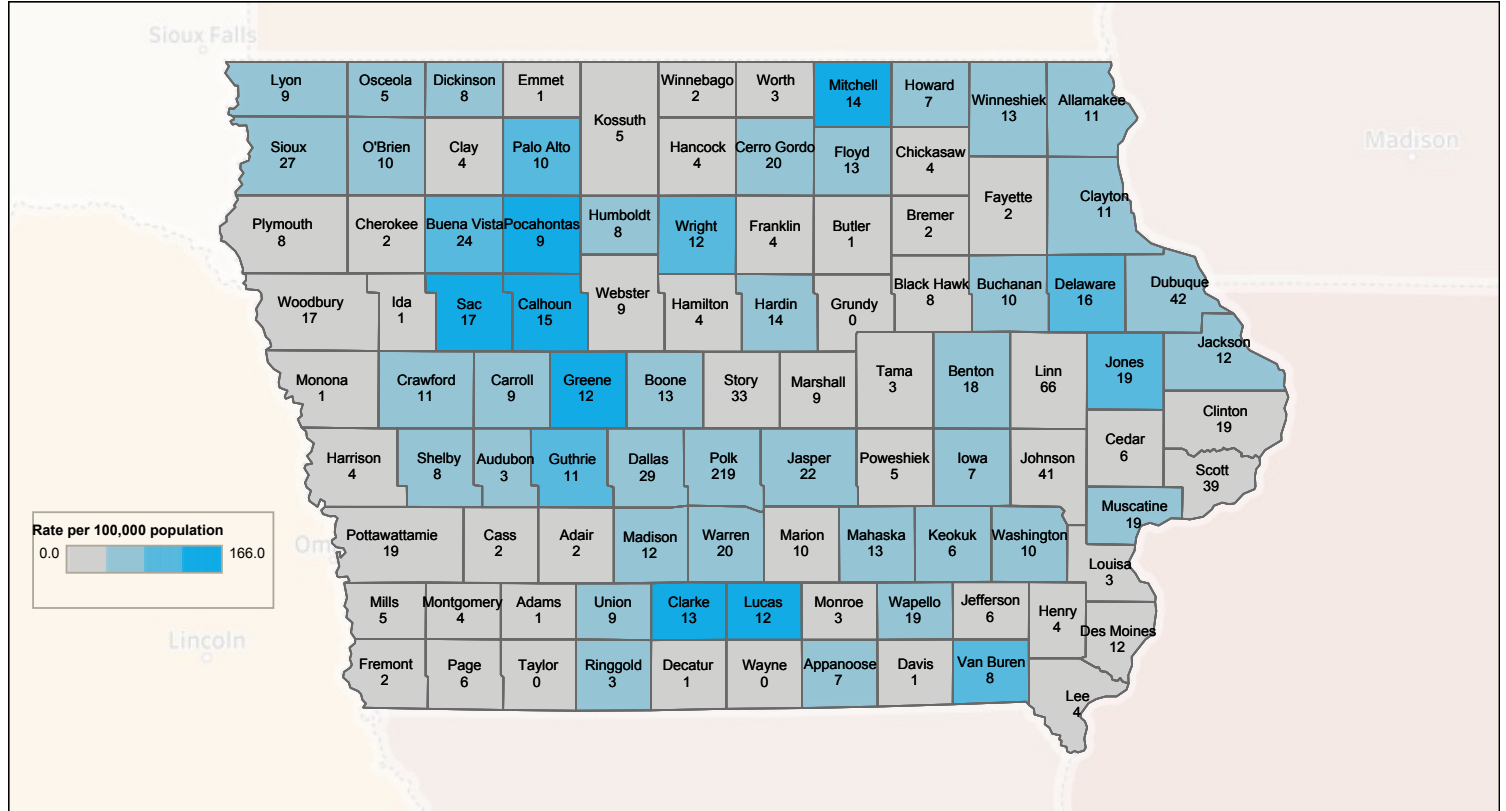
1,261

Cases in the last 12 months

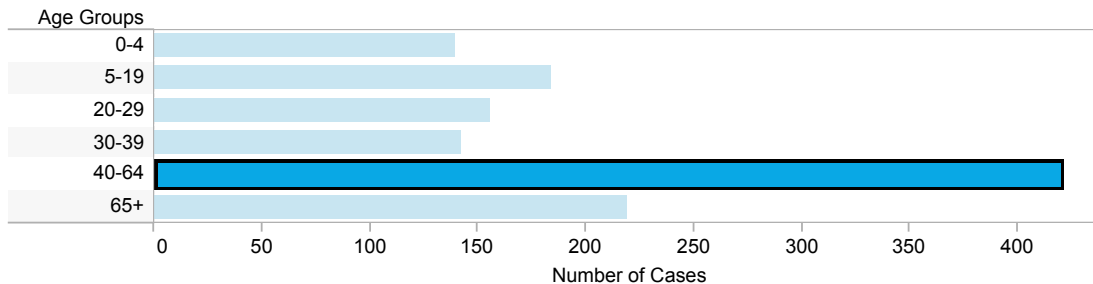
+72%

Change from previous
5 year average

Reported campylobacteriosis cases and incidence rates per 100,000 population by county of residence for the past 12 months



Campylobacteriosis cases by age in the past 12 months. A third of all cases occurred in the 40-64 year old age group.



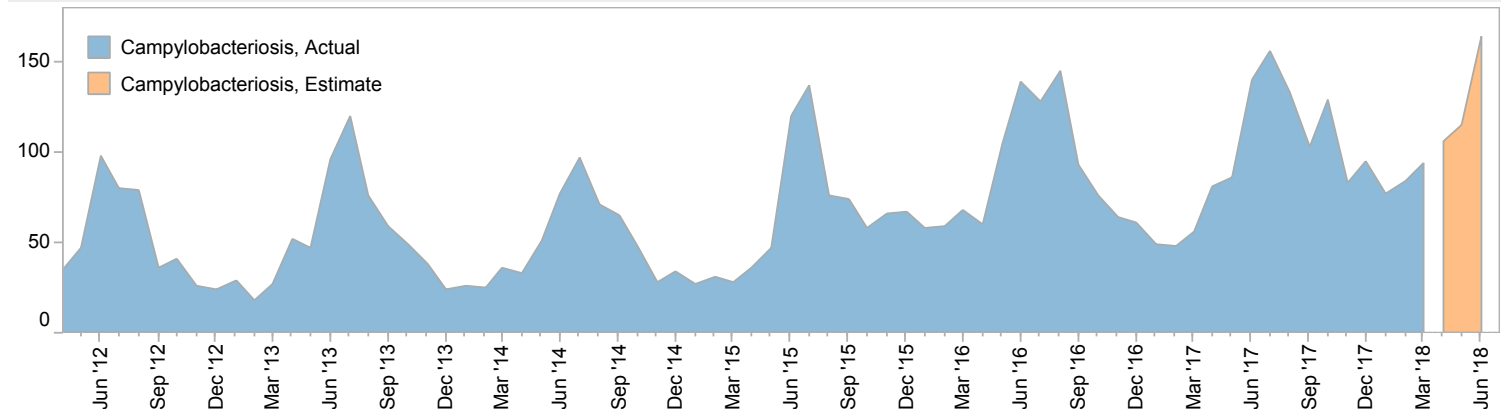
Hospitalizations in the past 12 months

52 (4%)

Campylobacteriosis cases by gender in the past 12 months

Female	598
Male	663

Reported campylobacteriosis cases by date of onset or first lab report and 3 month forecast



Giardia

11

Cases in March

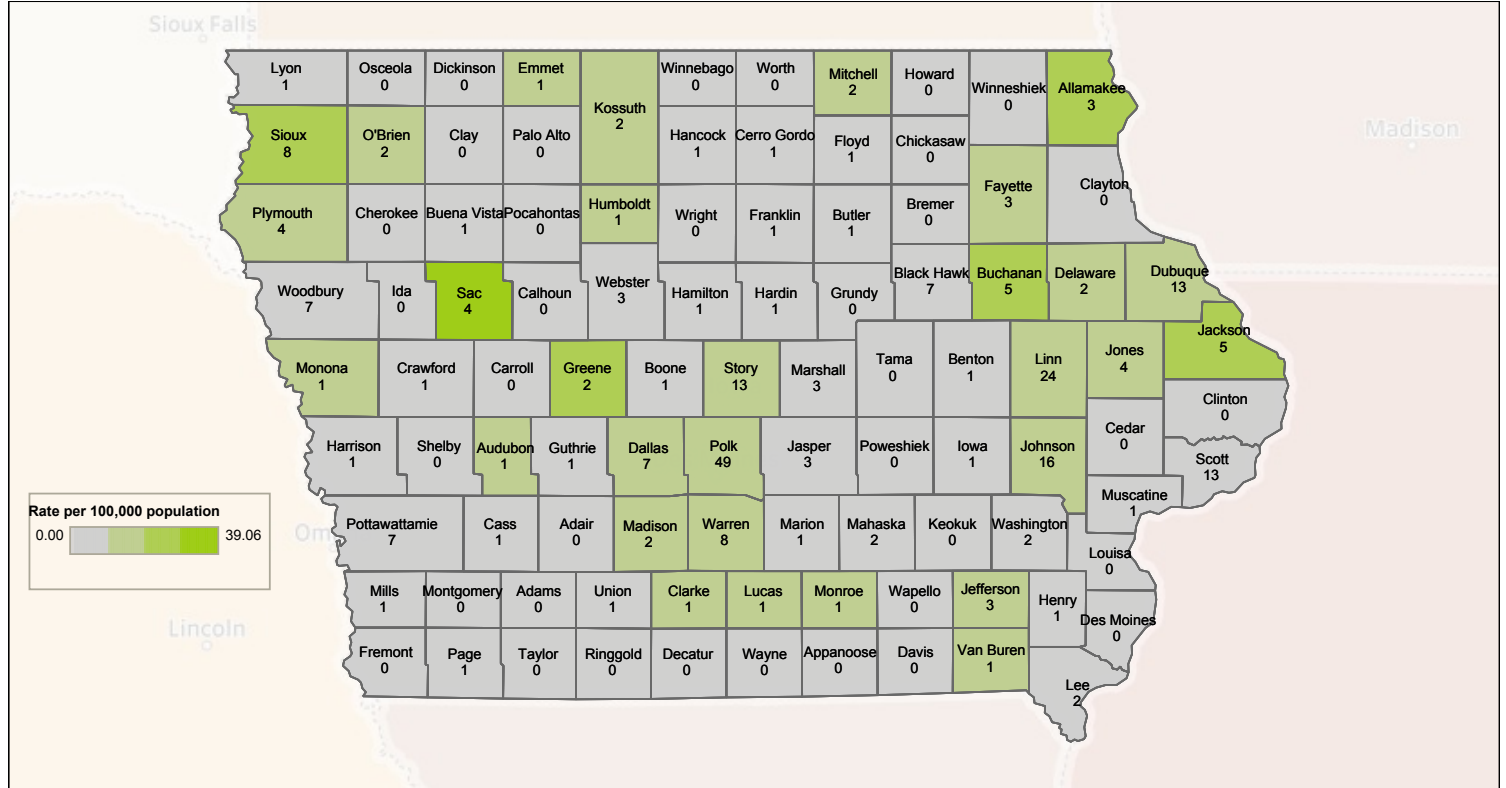
260

Cases in the last 12 months

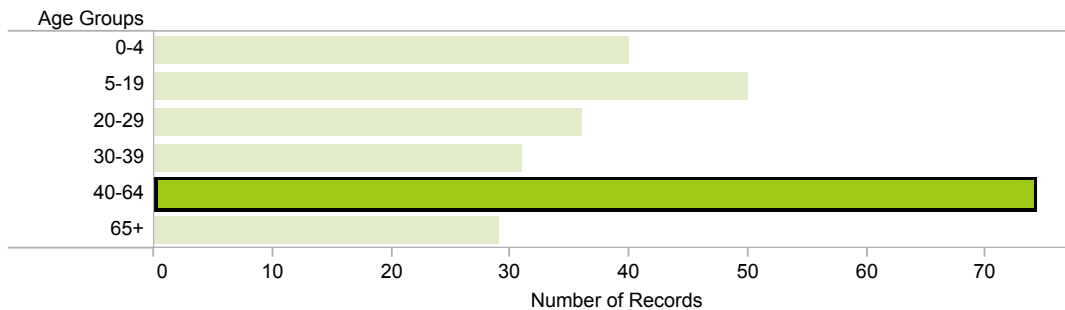
+7%

Change from previous
5 year average

Reported giardiasis cases and incidence rates per 100,000 population by county of residence for the past 12 months



Giardiasis cases by age past 12 months. A third of all cases occurred in the 40-64 age group.



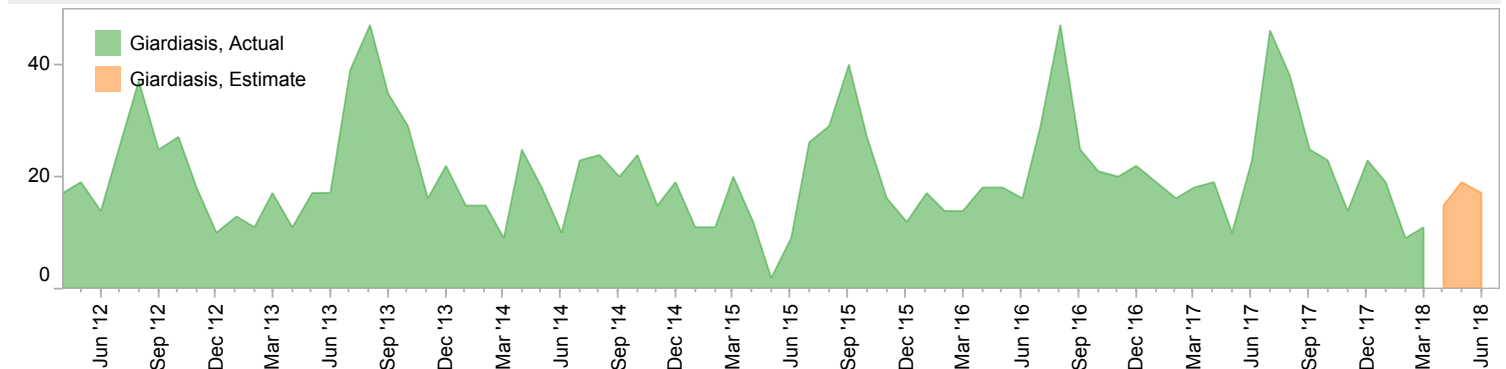
Hospitalizations in the past 12 months

27 (10%)

Giardiasis cases by gender past 12 months

Female	108
Male	152

Reported giardiasis cases by date of onset or first lab result and 3 month forecast



Mumps

2

Cases in March

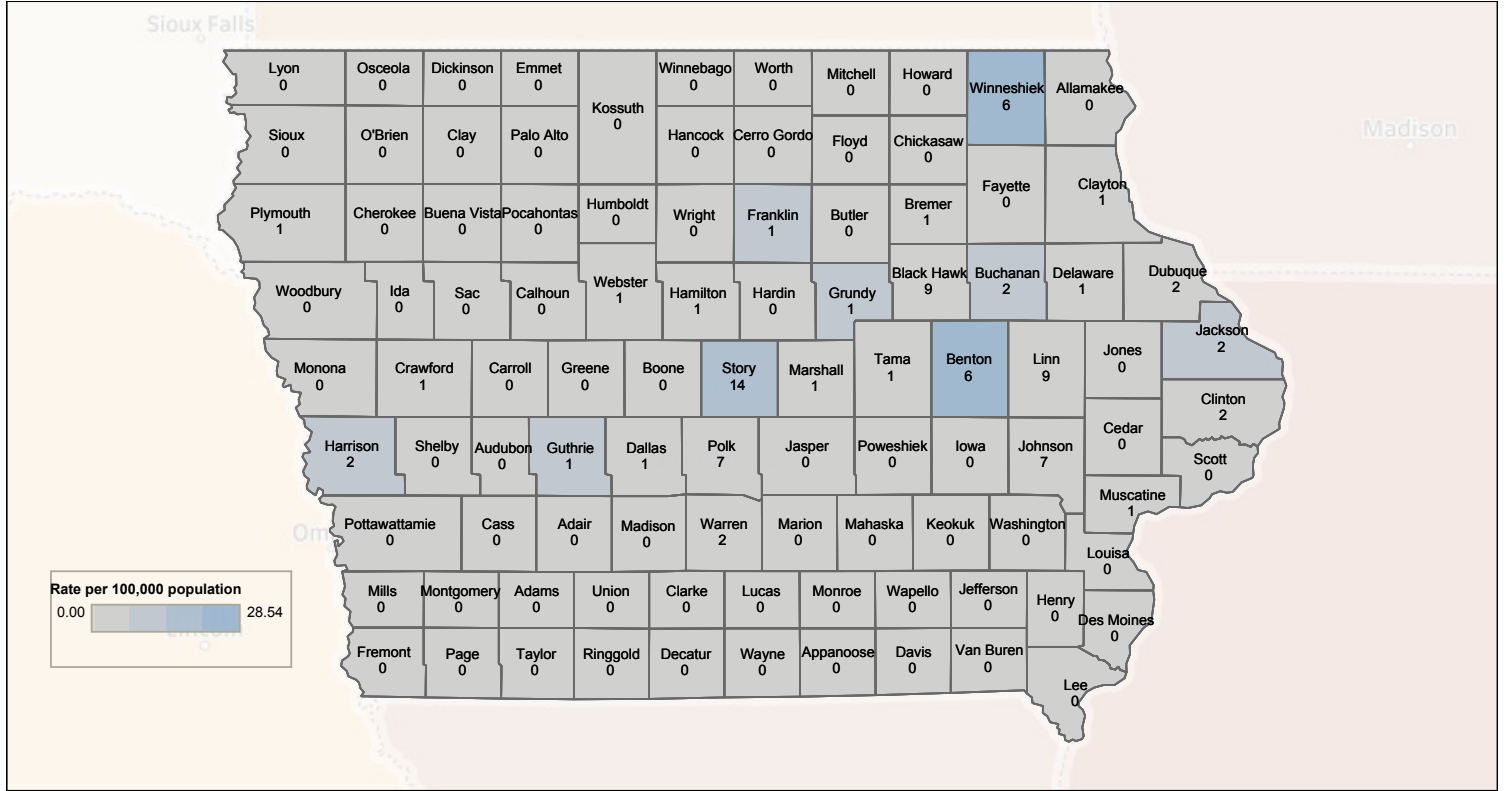
84

Cases in the last 12 months

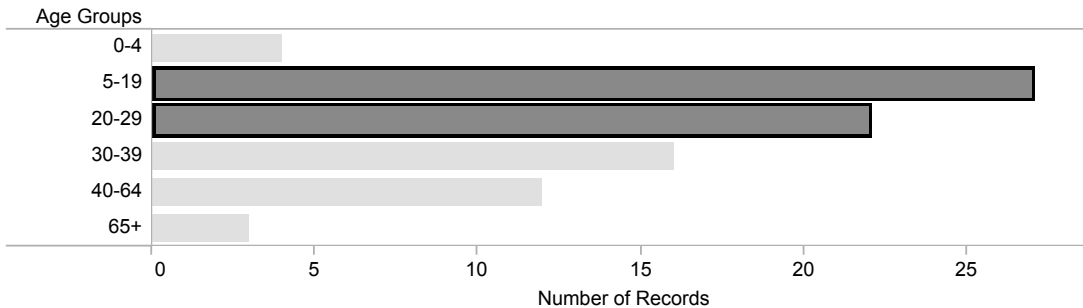
-66%

Change from previous
5 year average

Reported mumps cases and incidence rates per 100,000 population by county of residence for the past 12 months



Mumps cases by age past 12 months. Nearly two-thirds of all cases occurred in the 5-29 year old age groups.



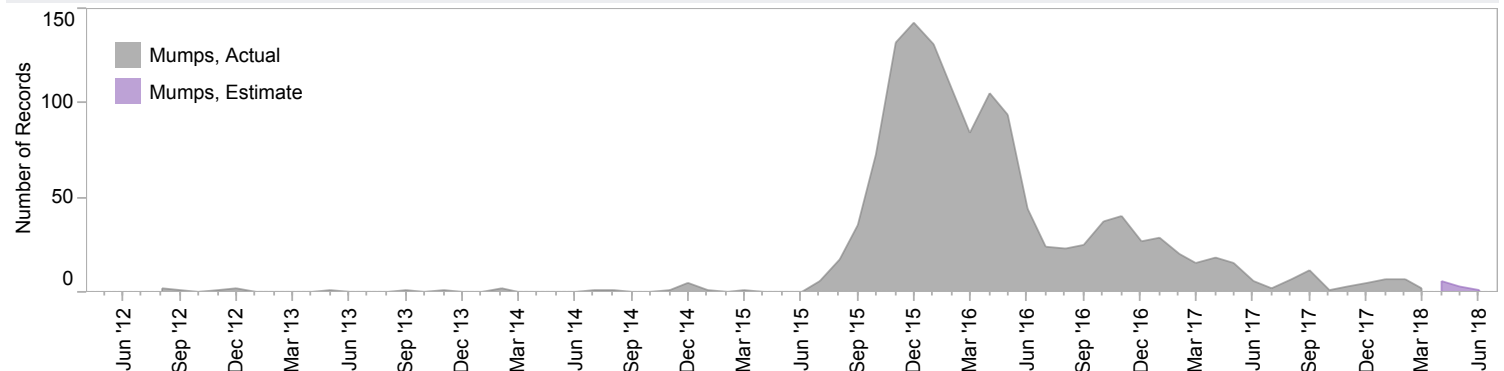
Hospitalizations in the past 12 months

8 (10%)

Mumps cases by gender past 12 months

Female	42
Male	42

Reported mumps cases by date of onset or first lab result and 3 month forecast



Pertussis

5

Cases in March

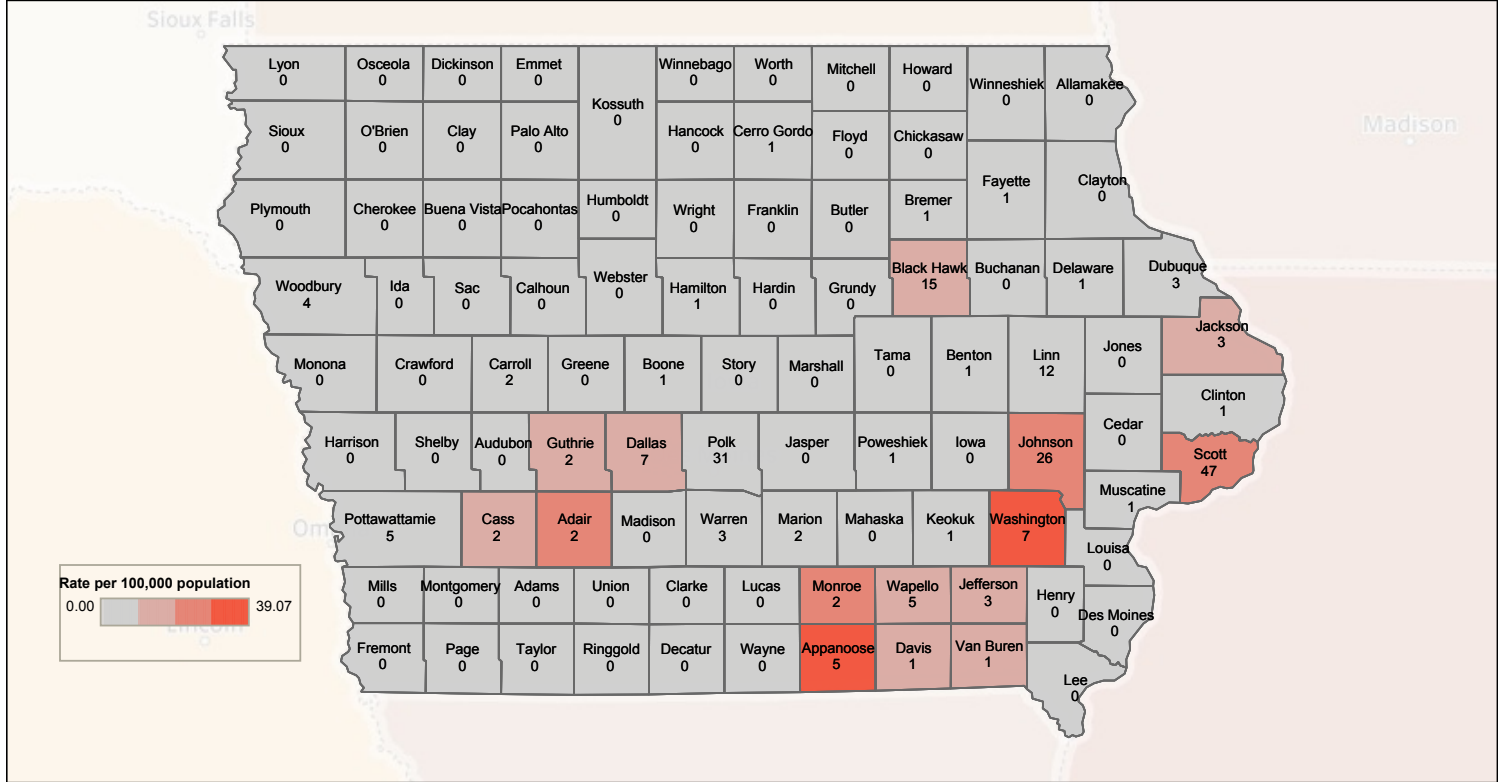
201

Cases in the last 12 months

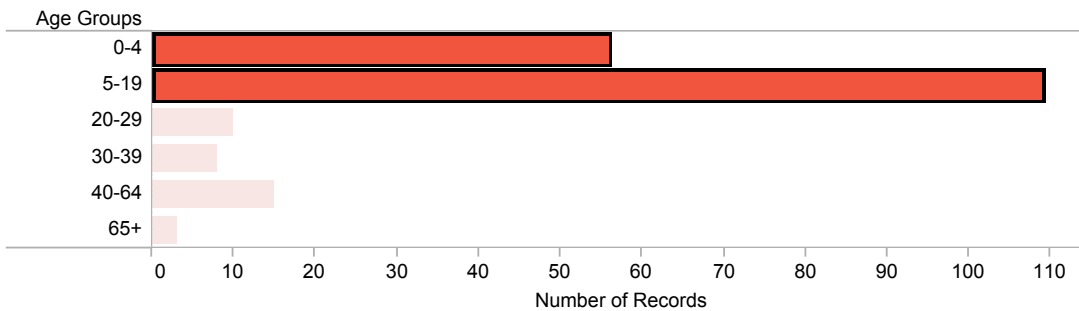
-59%

Change from previous
5 year average

Reported pertussis cases and incidence rates per 100,000 population by county of residence for the past 12 months



Pertussis cases by age past 12 months. Most cases occur in the 0-19 year age group.



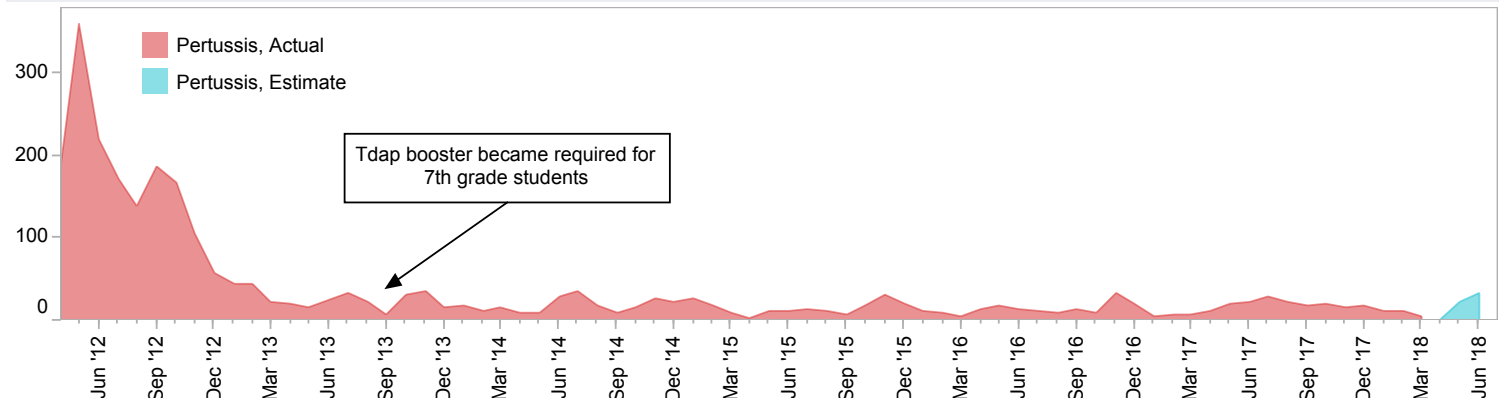
Hospitalizations in the past 12 months

8 (4%)

Pertussis cases by gender past 12 months

Female	110
Male	91

Reported pertussis cases by date of onset or first lab result and 3 month forecast



Salmonella

52

Cases in March

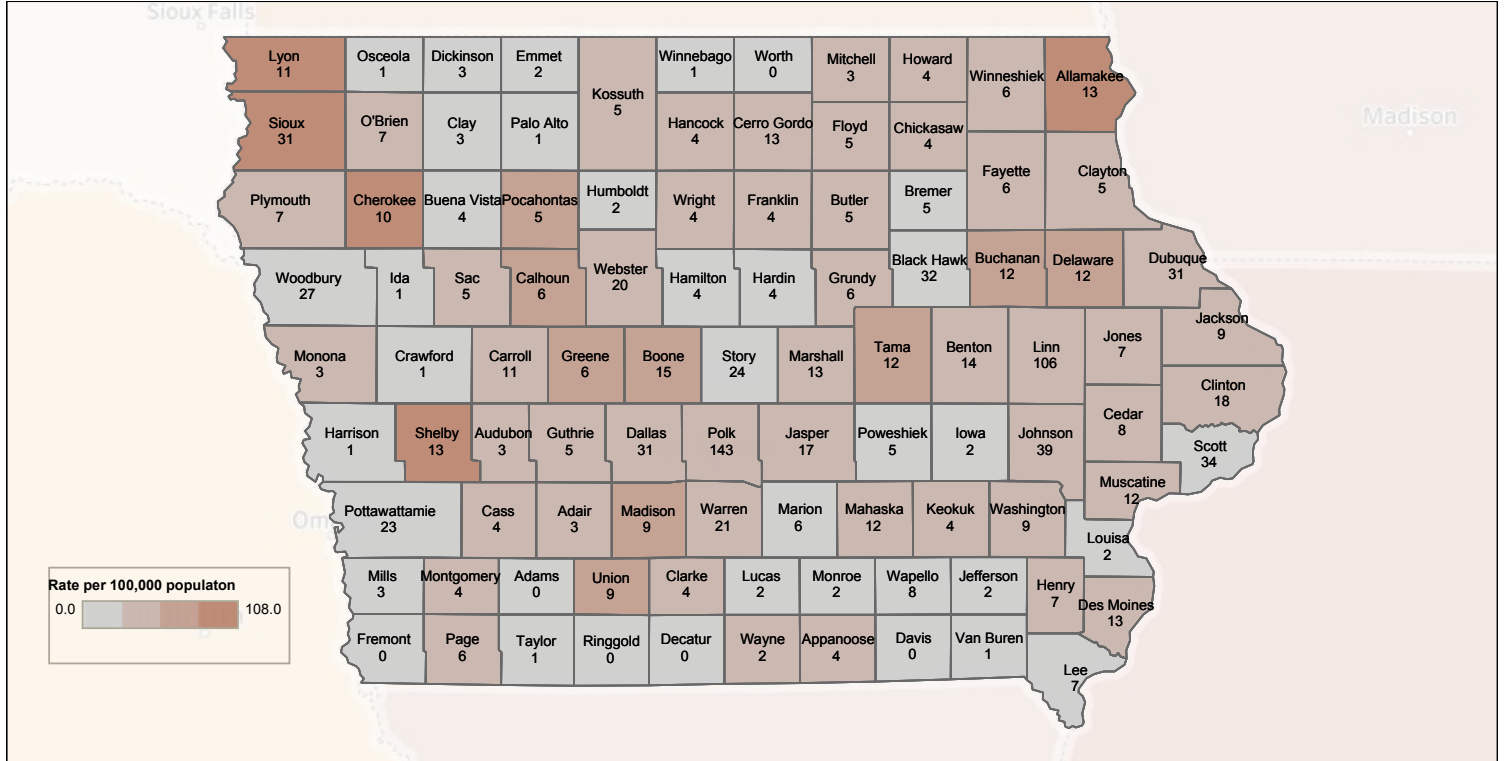
1054

Cases in the last 12 months

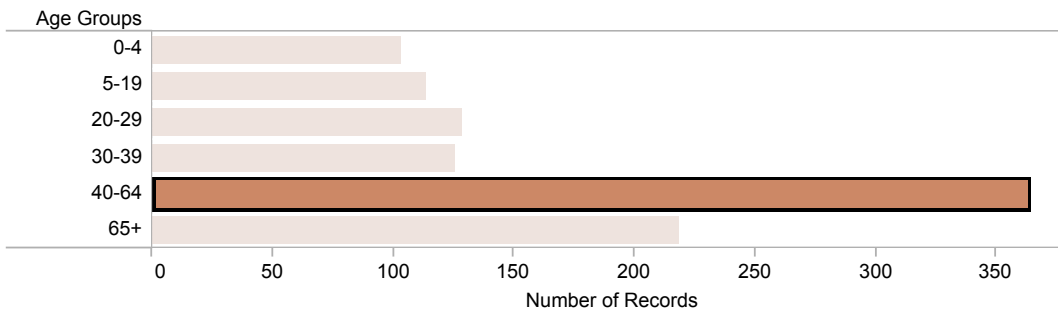
+66%

Change from previous
5 year average

Reported salmonellosis cases and incidence rates per 100,000 population by county of residence for the past 12 months



Salmonellosis cases by age past 12 months. Over a third of all cases occurred in the 40-64 year age group.



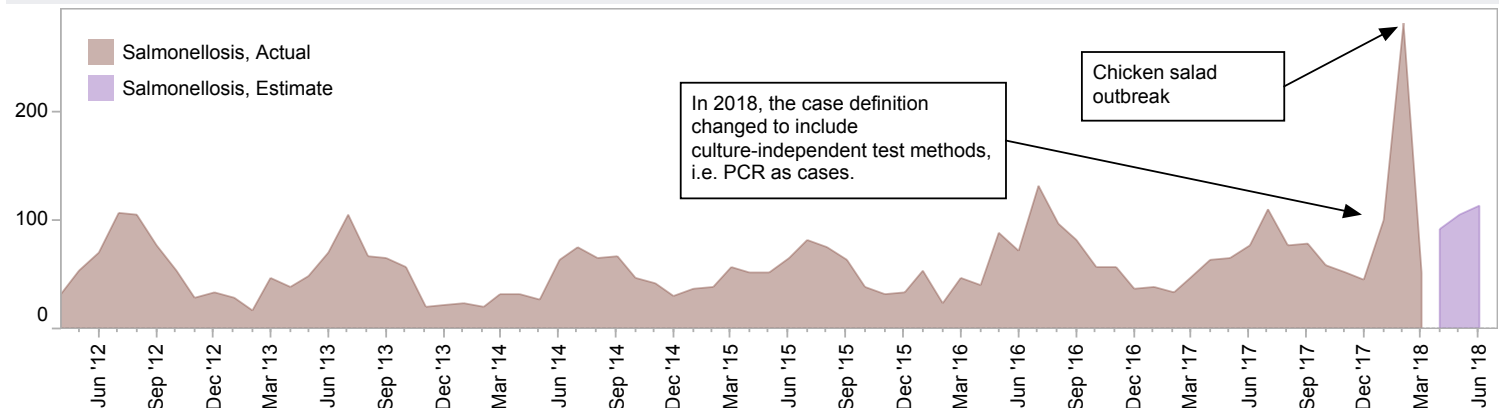
Hospitalizations in the past 12 months

263 (25%)

Salmonellosis cases by gender past 12 months

Female	587
Male	467

Reported salmonellosis cases by date of onset or first lab result and 3 month forecast



Shigella

6

Cases in March

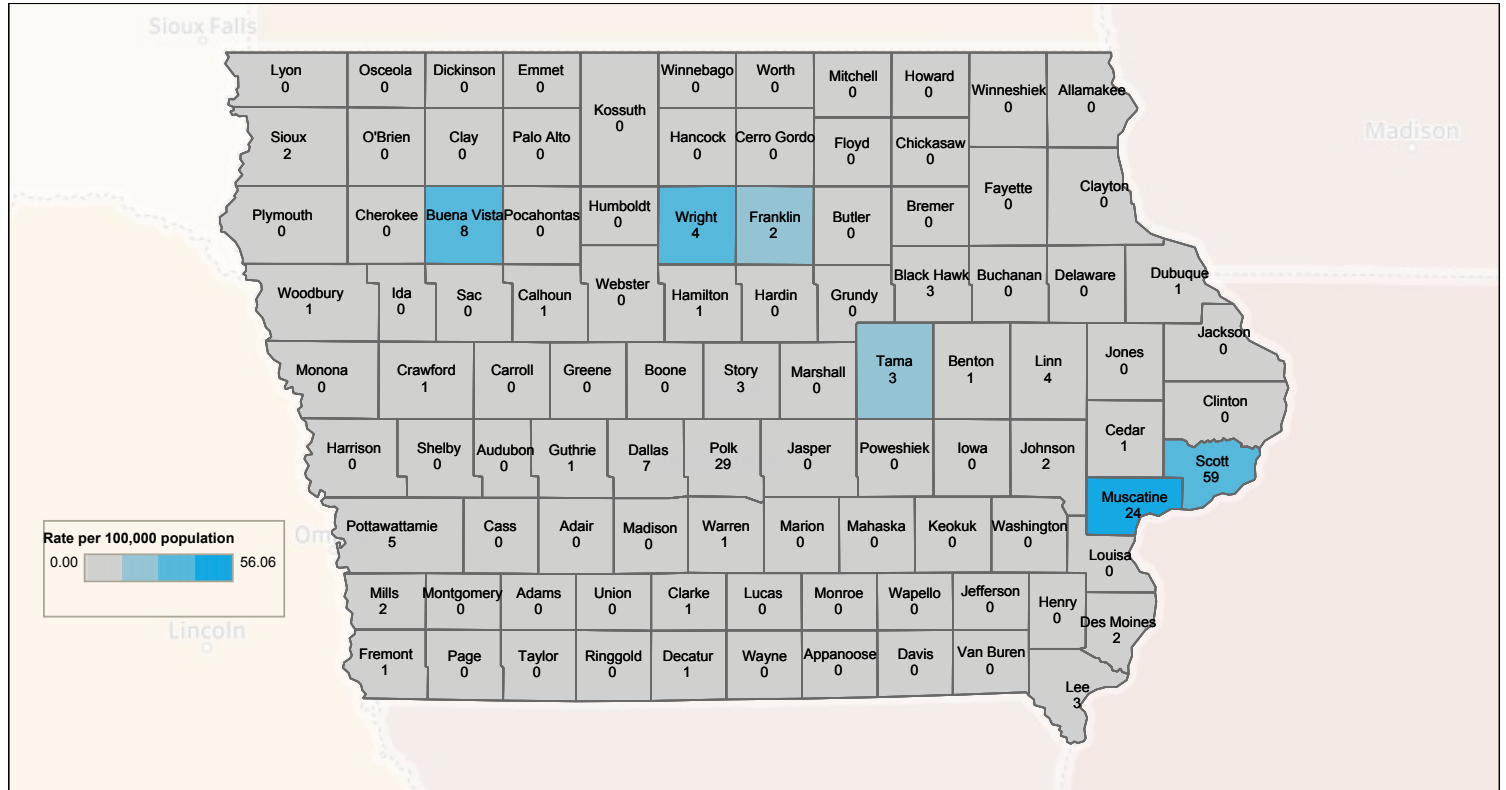
174

Cases in the last 12 months

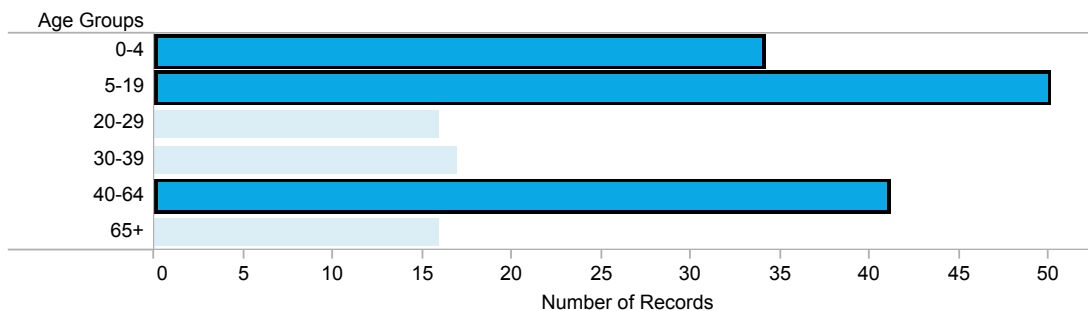
-51%

Change from previous
5 year average

Reported shigellosis cases and incidence rates per 100,000 population by county of residence for the past 12 months



Shigellosis cases by age past 12 months. Over 45 percent of all cases occurred in the 0-19 year age groups. An additional 24% of cases were in the 40-64 year age group.



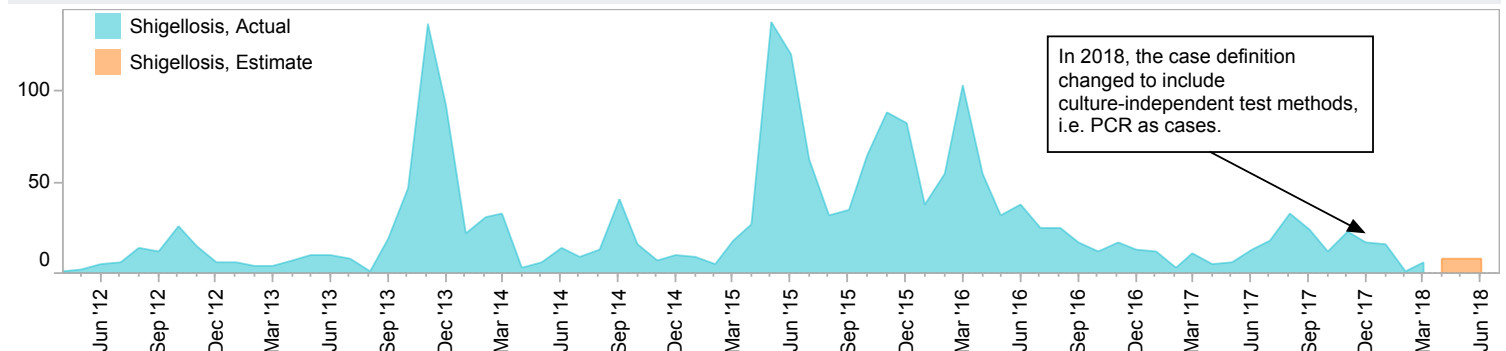
Hospitalizations in the past 12 months

26 (15%)

Shigellosis cases by gender past 12 months

Female	105
Male	69

Reported shigellosis cases by date of onset or first lab result and 3 month forecast



Select low-prevalence disease summaries

Legionella

1

Case in March

34

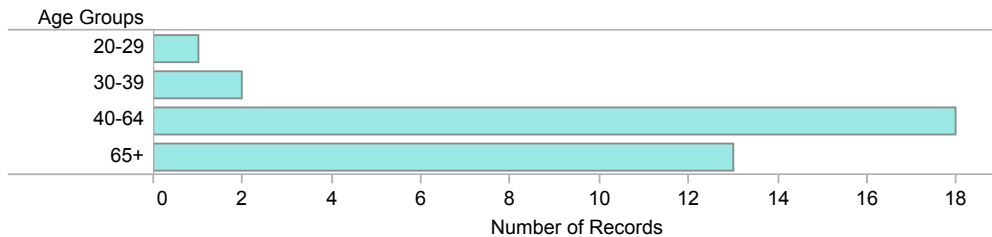
Cases in the last 12 months

+26%

Change from previous 5 years

..

Legionellosis cases by age past 12 months. No cases occurred in persons 0-19 years of age. Forty year olds and older accounted for 94% of cases.



Hospitalizations in the past 12 months

29

Legionellosis cases by gender past 12 months

Legionellosis	Female	13
	Male	21

Q Fever (acute and chronic)

0

Case in March

16

Cases in the last 12 months

+33%

Increase from previous year
(Q fever was made reportable in 2016)

Q fever cases (acute and chronic) by age in the past 12 months. No cases occurred in persons 0-19 years old.



Hospitalizations in the past 12 months

11

Q fever cases by gender past 12 months

Q Fever (acute and chronic)	Female	2
	Male	14

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